

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/521,896	03/09/00	RAMADAN	A JEK/RAMADAN

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EXAMINER

JACKSON, S

ART UNIT	PAPER NUMBER
3738	5

DATE MAILED: 06/05/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No.  
09/521,896

Applicant(s)

Ramadan et al.

Examiner  
Suzette Jackson

Art Unit  
3738



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Mar 9, 2000

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-14 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-12 and 14 is/are rejected.

7)  Claim(s) 13 is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on Mar 9, 2000 is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. 09/521,896.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

15)  Notice of References Cited (PTO-892) 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Oreftperson's Patent Drawing Review (PTO-948) 19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20)  Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "housing" "11" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

### ***Claim Rejections - 35 U.S.C. § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-3, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "blind housing" in claims 2, 3 and 6 is a relative term which renders the claim indefinite. The term "blind housing" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In particular the term "blind housing" is

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used in the specification on page 5 line 2, and in the claims but it does not describe what is meant by this term and leave room for interpretation.

***Claim Rejections - 35 U.S.C. § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

6. Claims 1-5, 7, 9, are rejected under 35 U.S.C. 102(e) as being anticipated by Nishijima et al. 5,899,941 which discloses the invention as claimed comprising: A disk with first and second plates designed to be fixed to adjacent cervical vertebrae; a ball joint interposed between the two plates mounted in a superposed position, the joint being constituted by a spherical cap/protrusion (11) co-operating with a spherical cup/receiver part (13) ; wherein the spherical cup is provided on a first insert, while the spherical cup is provided on a second insert; each insert is made of a ceramic material and possesses a base of circular right cross-section; one of the inserts is mounted on the first plate while the other insert is mounted on the second plate in such a manner that the center of rotation of the joint lies substantially centered relative to the edges of the plates so as to be centered in the sagittal plane and in the frontal plane of the vertebrae; the spherical cup having a contact area that is not less than the contact area of the spherical cap and is

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connected via an annular molding to the base of the insert and the plate provided with the insert having the spherical cap has an annular setback to leave clearance for the annular molding of the spherical cup during movement of the plates. having surfaces made of aluminum and zirconium and ceramics. (See col. 5, lines 20-57)

***Claim Rejections - 35 U.S.C. § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-5, 8-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishijima et al. in view of Cauthen 6,019,792. Nishijima et al. has been described above noting figure 1a-1b, and it is obvious that the surfaces can be manufactured with different surfaces as stated in col. 5, lines 2-57 "*since the artificial intervertebral disk comprises a pair of upper and lower first connecting bodies the artificial intervertebral disk is composed of two pieces, and the artificial intervertebral disk can be simply manufactured...*". It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the surfaces with different materials in order to provide an affinity material having excellent affinity with living tissue. Nishijima et al. does not specify an outer convex surface. Cauthen teaches a

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vertebral implant with an outer convex surface with protrusions (see figures 1 and 2) It would have been obvious to one having ordinary skill in the art at the time the invention was made take the invention of Nishijima et al and make the outer surface convex in order to comply with any surface in which the implant is to placed.

*Allowable Subject Matter*

9. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cauthen 6,179,874; Gordon et al. 6,146,421; Yuan et al. 5,676,701; Buttner-Janz et al. 5,401,269 all show related prosthesis.

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12. Any inquiry concerning this communication or earlier communication regarding this application should be directed to examiner Suzette Jackson at (703) 308-6516. In a case requiring immediate assistance, please call (703) 308-0858 to reach the main operator for Sector 3700.



S. Jackson  
01 June 2001



David H. Willse  
Primary Examiner